Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554



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| In the Matter of | ) | |
| | ) | |
| Allocation of Spectrum Below | ) | ET Docket No. 94-32 |
| 5 GHz Transferred from | ) | |
| Federal Government Use | ) | |



COMMENTS

AT&T Corp. ("AT&T") respectfully submits the following comments in response to the Commission's Second Notice of Proposed Rulemaking ("SNPRM"), FCC 95-47, released February 17, 1995.

The SNPRM (¶ 55) seeks comment on combining into a single Part 15 band the 2390-2400 MHz band, allocated to asynchronous unlicensed Personal Communications Services ("PCS") in the Report and Order accompanying the SNPRM,[1] and the adjacent 2400-2483.5 band, available for unlicensed spread spectrum devices.[2] The SNPRM (¶¶ 57-58) also asks for comments on rules for sharing in both bands between the unlicensed devices and the Amateur service, which has been granted primary status by the Report and Order. AT&T proposes

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[1] The Report and Order adds the 2390-2400 MHz band to the appropriate existing rules in Part 15, Subpart D, governing asynchronous devices in the 1910-1920 MHz band.

[2] 47 CFR §§ 15.247 and 15.249.

that the two bands be combined and identifies the technical rules which should apply. AT&T believes that cooperative study by the unlicensed device manufacturers and the amateur community should occur as a predicate to the development of any needed rules governing sharing of these bands between them.

Creating a Part 15 band extending from 2390 to 2483 MHz might offer some useful opportunities for both the unlicensed PCS devices which now cannot operate above 2400 MHz and to the spread spectrum devices which now cannot operate below 2400 MHz. If asynchronous PCS devices, in addition to operating in the 2390-2400 MHz band, can operate above 2400 MHz in a way that does not interfere with the spread spectrum devices, this contiguous spectrum will permit better performance than is available by using the two ten MHz segments (i.e., 1910-1920 MHz and 2390-2400 MHz) as at present. Similarly, if spread spectrum devices can operate down to 2390 MHz without interfering with the PCS devices, they can be further away from interference caused by the Industrial, Scientific and Medical devices, particularly the huge number of microwave ovens, centered at 2450 MHz.[3] Here again, improved performance will be the result.

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[3] 47 CFR § 18.301.

AT&T suggests that these opportunities can indeed be afforded without harm to the respective unlicensed operations on both sides of the 2400 MHz dividing line. The Commission's rules should require asynchronous PCS devices to obey the spread spectrum rules between 2400 and 2483 MHz. Correspondingly, spread spectrum devices operating below 2400 MHz should be required to obey the spectrum etiquette rules in § 15.321.[4] Thus, both above and below 2400 MHz the newly authorized users would behave in the same way as the presently authorized users, causing no harm.

Asynchronous PCS devices and spread spectrum devices can plainly operate in their separate bands without causing problems to each other. As discussed above, AT&T believes that they can co-exist comfortably in an expanded 2390-2483.5 MHz Part 15 band. On the other hand, sharing between these Part 15 devices and the Amateur service is a

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[4] Of course, neither the asynchronous devices nor the spread spectrum devices would be subject to the provisions of § 15.34(a) as amended by the Report and Order that operations be confined to the 2390-2400 MHz band. Moreover, if the current draft ANSI C63 SC7 measurement procedure becomes final, the out-of-band emissions rule in the 2390-2400 MHz band applicable to asynchronous PCS devices (§ 15.321(d)) would unjustifiably impact direct sequence spread spectrum devices operating in that band. That rule, with that measurement requirement, would require direct sequence devices to either contain very expensive filters or to operate at lower power, thereby reducing range and reliability. In these new circumstances the Commission should, in coordination with ANSI, undertake to revisit this measurement issue.

matter of concern, whether the 2390-2400 MHz and 2400-2483.5 MHz bands remain separate or are combined.

Prior to the release of the 2390-2400 MHz and 2402-2417 MHz bands from government to private use, which is the origin of this entire proceeding, the Amateur service had been secondary to the government in both bands. Part 15 devices, permitted only in the latter band, were subsidiary to all superior uses, including the Amateur service. Now that government use is gone, the Report and Order elevates the Amateur service to primary in both bands (¶¶ 17, 34).

It is true, as the SNPRM points out (id.), that Amateur service licensees and Part 15 device manufacturers are familiar with operating in a shared radio environment and that conflicts have not occurred. In a literal sense, it is also true that the elevation of the Amateur service from secondary to primary "will essentially preserve the status quo regarding use of this band" (SNPRM, ¶ 34), because the Part 15 devices will still be subordinate to the Amateur service. However, the fact that now there is no radio service superior to the Amateur service in these bands, thereby constraining amateur operations, may give rise to significantly changed circumstances.[5]

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[5] Indeed, the potential exercise by amateurs of this new primary status in these bands may necessitate making Part 15 devices primary and the Amateur service secondary, or making both activities co-primary.

The SNPRM makes it evident that the Commission has recognized that sharing problems between Part 15 devices and the Amateur service may emerge. Thus the Commission has requested comment on whether certain PCS or Amateur service uses "might be particularly disruptive" (SNPRM, ¶ 57), whether coordination should be implemented between Amateur and PCS use (id.), and whether rule changes should be made to facilitate both uses (SNPRM, ¶ 59).

In AT&T's view, neither the Amateur service community nor the Part 15 device manufacturers can provide authoritative answers to these questions at this time. The amateurs have not yet begun to exercise their newly-granted primary status, asynchronous PCS devices for the 2390-2400 MHz band are not yet in service, and the explosive growth of spread spectrum devices in the 2402-2417 MHz band is only beginning.

Accordingly, AT&T proposes that the Commission defer decision on these issues raised by the SNPRM until more is known, and that the Amateur service and Part 15 interests create a joint report to the Commission. If the Commission, on the basis of the best information that the Amateur service and Part 15 communities can provide, believes that sharing

rules are needed, a rulemaking proceeding would then be appropriate.

Respectfully submitted,

AT&T CORP.

By: Ernest A. Gleit

Mark C. Rosenblum
Kathleen F. Carroll
Ernest A. Gleit

Its Attorneys

Room 3261B3
295 North Maple Avenue
Basking Ridge, New Jersey 07920

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